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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/749,869	12/31/2003	Robert Edward Gamble	24AT-135859	6292
Patrick W. Ras	7590 03/16/2007 sche	EXAMINER		
Armstrong Teasdale LLP			PALABRICA, RICARDO J	
Suite 2600 One Metropoli	tan Sauare		ART UNIT	PAPER NUMBER
St. Louis, MO			3663	<u>.</u>
SHORTENED STATUTOR	RY PERIOD OF RESPONSE	MAIL DATE	DELIVER	Y MODE
3, MC	ONTHS	03/16/2007	PAI	PER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

		Application No.	Applicant(s)	
	Office Action Summer	10/749,869	GAMBLE ET AL.	
	Office Action Summary	Examiner	Art Unit	
,		Rick Palabrica	3663	
Period fo	The MAILING DATE of this communication or Reply	appears on the cover sheet wi	th the correspondence address	,
WHIC - Exter after - If NO - Failu Any r	ORTENED STATUTORY PERIOD FOR RECHEVER IS LONGER, FROM THE MAILING ansions of time may be available under the provisions of 37 CFR SIX (6) MONTHS from the mailing date of this communication. Period for reply is specified above, the maximum statutory per to reply within the set or extended period for reply will, by state to reply within the set or extended period for reply will, by state to reply within the set or extended period for reply will, by state to reply within the set or extended period for reply will, by state to reply within the set or extended period for reply will, by state to provide the provided by the Office later than three months after the med patent term adjustment. See 37 CFR 1.704(b).	DATE OF THIS COMMUNION R 1.136(a). In no event, however, may a ricid will apply and will expire SIX (6) MON atute, cause the application to become AE	CATION.  eply be timely filed  THS from the mailing date of this communication  ANDONED (35 U.S.C. § 133)	
Status				
1)	Responsive to communication(s) filed on 1	8 December 2000 and 15 Fel	ruany 2007	
	<u> </u>	This action is non-final.	<u> </u>	
	Since this application is in condition for allo		ers prosecution as to the morits	ic
<del>-</del> ر-	closed in accordance with the practice under			13
Dispositi	on of Claims	parto quajio, 1000 O.D	. 11, 400 0.0. 210.	
	Claim(s) <u>5-19 and 25-28</u> is/are pending in t	he application		
	4a) Of the above claim(s) <u>5-8,13-16,27 and</u>		cidoration	
	Claim(s) is/are allowed.	26 Is/are withdrawn from con	sideration.	
′=	* * ——	·		
	Claim(s) <u>9-12,17-19,25 and 26</u> is/are reject	ea.		
	Claim(s) is/are objected to.	Allan alankan na satu na s		
8)□	Claim(s) are subject to restriction an	d/or election requirement.		
Applicati	on Papers			
9) 🗌 -	The specification is objected to by the Exam	iner.		•
10)🛛 ¯	The drawing(s) filed on <u>12/31/03</u> is/are: a)□	] accepted or b)⊠ objected t	o by the Examiner.	
	Applicant may not request that any objection to t	he drawing(s) be held in abeyan	ce. See 37 CFR 1.85(a).	
	Replacement drawing sheet(s) including the corr			(d).
	The oath or declaration is objected to by the			
Priority u	ınder 35 U.S.C. § 119			
_	Acknowledgment is made of a claim for fore ☐ All b)☐ Some * c)☐ None of:	ign priority under 35 U.S.C. §	119(a)-(d) or (f).	
•	1. Certified copies of the priority docume	ents have been received.		
	2. Certified copies of the priority docume		pplication No.	
	3. Copies of the certified copies of the p			
	application from the International Bur			
* S	ee the attached detailed Office action for a l	` ' ' ' ' ' ' ' ' ' ' ' ' ' ' ' ' ' ' '	received.	
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Attachment		<b>,, □</b>	(DTO 442)	
	e of References Cited (PTO-892) e of Draftsperson's Patent Drawing Review (PTO-948)		ummary (PTO-413) )/Mail Date	
) 🔲 Inform	nation Disclosure Statement(s) (PTO/SB/08)	5) 🔲 Notice of In	formal Patent Application	
	No(s)/Mail Date	6)  Other:	<u>_</u> ·	

### **DETAILED ACTION**

1. Applicant's 12/18/06 and 2/16/07 Responses, which directly amended claims 9 and 16, and traversed the rejection of claims in the 9/18/06 Office action, is acknowledged.

Applicant's arguments have been considered but are moot in view of the new ground(s) of rejection.

### Drawings

2. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the layer of refractory material disposed on top of top plate 87 must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering

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of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

- 3. The examiner notes that the elected species A (Fig. 2), <u>does not include</u> the following elements:
- a. "base grid wall spaced inwardly from said drywell sidewall to define an annular channel therebetween" (see claims 9 and 17);
- b. "an inlet flow channel extending through at least one of said <u>annular</u> channel providing flow communication between said drywall and said sump, <u>AND</u> an inlet flow passage through said drywell side wall providing flow communication between said sump and said suppression pool" (see claim 9);
- c. "an outlet flow channel extending through at least one of said <u>annular</u> channel providing flow communication between said sump and said drywall, <u>AND</u> an inlet flow passage through said drywell side wall providing flow communication between said sump and said suppression pool" (see claim 9);
- d. "an inlet passage providing flow communication between said sump and at least one of said drywell and said suppression pool, said inlet flow channel extending through at least one of the said <u>annular</u> channel and said drywell sidewall" (see claim 17);

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e. "an outlet passage providing flow communication between said sump and at least one of said drywell and said suppression pool, said outlet passage extending through at least one of the said <u>annular</u> channel and said drywell sidewall, said inlet and outlet passages configured to circulate water between said sump and at least one of said drywell and said suppression pool by convection" (see claim 17);

- f. "inlet passage" (see claims 5 and 6);
- g. "outlet passage" (see claims 7 and 8).

Based on the above exclusions, claims 9 (partly), 10-12, 17 (partly), 18, 19, 25, 26, which read on the elected embodiment shown in Fig. 2, are examined in this Office action: Claims 5-8, 13-16, 27, and 28, which do not read on Fig. 2, are withdrawn from consideration.

## Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 3. Claims 9, 10-12, 17, 18, 19, 25, 26 are rejected under 35 U.S.C. 102(b) as being anticipated by Wistuba et al. (U.S. 5,659,589), who disclose a core catcher for a nuclear reactor (see Figs. 1-7).

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As to claims 9 and 17, applicant's claim language reads on Wistuba et al.'s invention as follows: a) containment vessel reads on reactor containment 2; b) "suppression pool" reads on coolant reservoir 18; c) "drywell" reads on shielding 6; d) "drywell sidewall extending from said floor" reads on the wall 8 of shielding shield 6; e) "base grid having a 'top plate', which reads on expansion plate 40 and a 'bottom plate', which reads on metal plate 34" (see Fig. 2); f) "layer of refractory material on top of said top plate" reads on top layer 38 which is fireproof, i.e., refractory (see also col. 7, lines 51+); g) "annular base grid shield wall" reads on the combination of the walls of expansion chamber 12 and the vertical wall of expansion plate 40; g) "sump" reads on the space below metal plate 34; h) "flow baffle " reads on trapezoidal support strips 36 that provide flow paths 28, 30 between strips (see Fig. 7 and col. 7, lines 45+).

As to claims 10 and 18, the claims are directed to an <u>apparatus</u> and to a <u>process</u>. The limitation, "substantially sinuous flow path" is a process limitation that does not serve to patently distinguish the claimed apparatus over Wistuba et al. Nonetheless, the flow paths 28, 30 in Wistuba et al. are inherently sinuous.

As to claims 11 and 19, see Fig. 2 and the trapezoidal configuration of baffles 36.

As to claims 12 and 26, Wistuba et al.'s flow baffle inherently includes a flow inlet side (i.e., a side where coolant enters) and a flow outlet side (i.e., a side where coolant exits). The limitations "inlet" and "outlet" are process limitations, but Wistuba et al. meet these limitations anyway.

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As to claim 25, applicant's claim language, "cone" reads any one of the plurality of trapezoidal elements 36 (which have a truncated cone configuration), other than the ones read on claim language "baffle."

The claims are replete with statements that are either essentially method limitations or statements of intended or desired use. For example, "providing a flow communication between said drywell and said sump" (e.g., see claim 9), "sinuous flow path" (e.g., see claim 10), "flow inlet" and "flow outlet" (e.g., see claim 26), etc. These clauses, as well as other statements of intended use do not serve to patently distinguish the <u>claimed</u> structure over that of the reference, as long as the structure of the cited references is capable of performing the intended use. See MPEP 2111-2115.

#### See also MPEP 2114 that states:

A claim containing a "recitation with respect to the manner in which a claimed apparatus is intended to be employed does not differentiate the claimed apparatus from a prior art apparatus" if the prior art apparatus teaches all the structural limitations of the claim. <u>Ex parte Masham</u>, 2 USPQ2d 1647.

Claims directed to apparatus must be distinguished from the prior art in terms of structure rather than function. *In re Danly*, 263 F.2d 844, 847, 120 USPQ 528, 531.

[A]pparatus claims cover what a device is, not what a device does." <u>Hewlett-Packard Co. v. Bausch & Lomb Inc.</u>, 15 USPQ2d 1525,1528.

As set forth in MPEP 2115, a recitation in a claim to the material or article worked upon does not serve to limit an apparatus claim.

The system in the cited reference is capable of being used in the same manner and for the intended or desired use as the claimed invention. Note that it is sufficient to show that said capability exists, which is the case for the cited reference.

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#### Conclusion

4. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Rick Palabrica whose telephone number is 571-272-6880. The examiner can normally be reached on 6:00-4:30, Mon-Thurs.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jack Keith can be reached on 571-272-6878. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

RJP March 12, 2007

> RICARDO J. PALABRICA PRIMARY EXAMINER